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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b>		<b>Application Number &amp; Confirmation Number</b>	10/658,356	2103
		<b>Filing Date</b>	9/9/2003	
		<b>First Named Inventor</b>	Spilker, Jr.	
		<b>Group Art Unit</b>	3662	
		<b>Examiner Name</b>		
<b>Total Number of Pages in This Submission</b>		<b>Attorney Docket Number</b>	RSM047001	

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Copies of Cited Documents, Postcard
<input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s)		
<input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request		
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<input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Richard A. Dunning, Jr.
Signature	
Date	4/25/04

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on this date:

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Spilker, Jr. et al.                      Art Unit : 3662  
 Serial No. : 10/658,356                      Examiner :  
 Filed : 9/9/2003                      Conf. No. : 2103  
 Title : POSITION LOCATION USING BROADCAST DIGITAL TELEVISION  
           SIGNALS COMPRISING PSUEDONOISE SEQUENCES

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.56 and 1.97-98**

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is a modified form PTO-1449 listing documents for consideration by the Examiner.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of documents, or that inclusion of a document in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed:

- within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first office action on the merits, whichever event last occurred;
- before the mailing of a first official action after the filing of a request for continued examination (RCE) under 37 CFR § 1.114;
- after three months from the filing date of this national application or the date of entry of the national stage in an international application, or after the mailing date of the first official action on the merits, whichever event last occurred, but before the mailing date of the first to occur of either: (1) a final action under 37 CFR § 1.113; or (2) an action that otherwise closes prosecution in the application, and:

## CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

4-26-04  
 Date of Deposit

Diane Dunning  
 Signature

Diane Dunning  
 Typed or Printed Name of Person Signing Certificate

- attached hereto is the fee set forth under 37 CFR § 1.17(p) for submission of this Information Disclosure Statement under 37 CFR § 1.97(c); OR
- Applicant certifies pursuant to 37 CFR § 1.97(e) that:
  - each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; OR
  - no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement;
- before the payment of the issue fee but after the mailing date of the first to occur of either: (1) a final action under 37 CFR § 1.113; or (2) an action that otherwise closes prosecution in the application, and:
  - Applicant certifies pursuant to 37 CFR. § 1.97(e) that:
    - each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
    - no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement; AND
  - attached hereto is the fee set forth under 37 CFR § 1.17 (p) for submission of this Information Disclosure Statement under 37 CFR § 1.97(c); OR
- after the payment of the issue fee. Applicant requests that the information contained in this Information Disclosure Statement be placed in the file according to 37 CFR § 1.97(i), although the information may not be considered by the USPTO.
- This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application No. \_\_/\_\_\_,\_\_\_\_, filed on \_\_\_\_\_, and the documents cited therein are hereby referenced, but are not required to be provided in this application under 37 CFR § 1.98(d).
- Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual designated in 37 CFR § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement. 37 CFR § 1.704(d).

Applicant : Spilker, Jr.  
Serial No. : 10/658,356  
Filed : 9/9/2003

Attorney's Docket No.: RSM047001

Page: 3

- Applicant submits that no fee is required for the consideration of this Information Disclosure Statement.
- Consideration of the listed documents and favorable action are respectfully requested.

Date: 4/25/04  
Law Office of Richard A. Dunning, Jr.  
343 Soquel Avenue, Suite 311  
Santa Cruz, CA 95062  
Telephone: 831.420.0561  
Facsimile: 413.541.0092

Respectfully submitted,



Richard A. Dunning, Jr.  
Attorney/Agent for Applicant(s)  
Reg. No. 42502



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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

## Complete if Known

Appl. No. & Conf. No.	10/658,356	2103
Filing Date	9/9/2003	
First Named Inventor	Spilker, Jr. et al.	
Group Art Unit	3662	
Examiner Name		

Attorney Docket Number RSM047001

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
A	5,157,686			Omura et al.	10-20-1992	
B	5,166,952			Omura et al.	11-24-1992	
C	5,920,284			Victor	07-06-1999	
D	6,078,284			Levanon	06-20-2000	
E	6,107,959			Levanon	08-22-2000	
F	6,137,441			Dai et al.	10-24-2000	
G	6,317,500	B1		Murphy	11-13-2001	
H	6,373,432	B1		Rabinowitz et al.	04-16-2002	
I	6,374,177	B1		Lee et al.	04-16-2002	
J	4,555,707			Connelly	11-26-1985	
K	5,045,861			Duffett-Smith	09-03-1991	
L	5,481,316			Patel	01-02-1996	
M	5,510,801			Engelbrecht et al.	04-23-1996	
N	6,094,168			Duffett-Smith et al.	07-25-2000	
O	5,774,829			Cisneros et al.	06-30-1998	
P	5,952,958			Speas et al.	09-14-1999	
Q	4,894,662			Counselman	01-16-1990	
R	5,398,034			Spilker, Jr	03-14-1995	
S	5,323,322			Mueller et al.	06-21-1994	
T	5,504,492			Class et al.	04-02-1996	
U	5,593,311			Davies et al.	09-14-1999	
V	10/036,700			Panasik et al.	12-31-2001	
W	4,652,884			Starker	03-24-1987	
X	6,433,740			Gilhausen	08-2002	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
Y	GB	2 222 922	A		Spectronics Micro System	03-21-1990		
Z	GB	2 254 508	A		Mitchison, et al.	10-07-1992		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet	2	of	2	Attorney Docket Number	RSM047001
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**Complete if Known**

Appl. No. & Conf. No.	10/658,356	2103
Filing Date	9/9/2003	
First Named Inventor	Spilker, Jr. et al.	
Group Art Unit	3662	
Examiner Name		

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA	PARKINSON, B.W., et al., "Autonomous GPS Integrity Monitoring Using the Pseudorange Residual," <i>Journal of the Institute of Navigation</i> (1988), Vol. 35, No. 2, pages 255-274.	
	AB	RABINOWITZ, M., "A Differential Carrier Phase Navigation System Combining GPS with Low Earth Orbit Satellites for Rapid Resolution of Integer Cycle Ambiguities," <i>PhD Thesis for Department of Electrical Engineering, Stanford University</i> (Dec. 2000), pages 59-73.	
	AC	SPILKER, JR., J.J., "Fundamentals of Signal Tracking Theory," <i>Global Positioning System: Theory and Applications</i> (1994), Vol. 1, Chapter 7, pages 245-327.	
	AD	VANDIERENDOCK, A.J., "GPS Receivers," <i>Global Positioning System: Theory and Applications</i> (1995), Vol. 1, Chapter 8, pages 329-407.	
	AE	LI, X., et al., "Indoor Geolocation Using OFDM Signals in HIPERLAN/2 Wireless LANS," 11 <sup>th</sup> IEEE International Symposium on Personal Indoor and Mobile Radio Communications, PIMRC 2000, Proceedings (Cat. No. 00TH8525), Proceedings of 11 <sup>th</sup> International Symposium on Personal Indoor and Mobile Radio Communication, London, UK, Sept.. 18-21, pp.1449-1453, Vol. 2, XPO10520871, 2000, Piscataway, NJ, USA, IEEE, USA, ISBN: 9-7803-6463-5, Chapter I and III	
	AF	RABINOWITZ, M., et al., "Positioning Using the ATSC Digital Television Signal," Rosum whitepaper, Online! 2001, XP002235053, Retrieved from the Internet on 03-13-2003 at URL <a href="http://www.rosum.com/whitepaper_8-7-01.pdf">www.rosum.com/whitepaper_8-7-01.pdf</a>	
	AG	EP Abstract/Zusammenfassung/Abrege, 02102666.1	
	AH	JP Abstract/ Vol. 007, No. 241 (P-232), 10-26-1983 & JP58 129277 A (Nihon Musen KK) 08-02-1983	

Examiner Signature	Date Considered
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